
Reclaimed Asphalt Pavement (RAP) as a Clean Fill Material

The asphalt pavement industry is America's biggest recycler. More than 60 million tons of asphalt pavement material is reclaimed each year during road widening and resurfacing projects, and nearly all of that material is reused. Incorporating reclaimed asphalt pavement (RAP) into new pavements reduces demands for virgin asphalt binder, helping to keep costs down as well as improving the environmental footprint of projects.

Not all RAP is recycled into new asphalt pavements, however. Occasionally, the question arises as to whether or not RAP can be used as "clean fill." Although obviously not the highest and best use of this vital resource, regulations regarding when and where RAP can be placed as fill material vary from state to state and can be complex. In most instances, RAP falls under state solid-waste requirements and purview.

Because state environmental agencies often have more restrictive solid-waste disposal regulations than the federal Environmental Protection Agency, it is important to understand how RAP is defined. U.S. EPA classifies RAP as construction and demolition (C&D) debris that is part of the federal solid-waste chain. Federal regulations also identify that if materials are "recycled," then they are not considered solid waste. However, there is a "speculative accumulation" federal definition that requires a 75 percent annual "turnover" to maintain the recycled material classification vs. solid waste.

RAP is not, and never has been, considered a "hazardous" solid waste. Years of leaching studies show that there are no harmful components leached from RAP under the most stringent waste definition extraction conditions. (See NAPA Special Report 190: "Reclaimed Asphalt Pavement (RAP) Stockpile Emissions and Leachate.")

In general, it is acceptable for RAP to be used as a road material — as part of the base, recycled back into pavement, etc. — both from a federal and state perspective. Although U.S. EPA does not appear to have a strict definition of "clean fill", specific requirements do apply to solid-waste materials applied to land.

In contrast, a number of state environmental agencies do have specific definitions for "clean fill" and many state regulations prescribe how RAP can or cannot be used as a

fill-like material. In a number of states, the use of RAP fill is specifically restricted, for example, near surface or subsurface sources of water.

The bottom line is that each state's environmental agency will likely dictate whether or not RAP can be used as a clean fill material. Under normal use and circumstances, RAP should never be considered as hazardous waste.

See Also

- NAPA Special Report 190: "Reclaimed Asphalt Pavement (RAP) Stockpile Emissions and Leachate"
<http://www.asphaltpavement.org/images/stories/SR-190revised.pdf>
- IS-123: Recycling Hot-Mix Asphalt Pavements
<http://store.asphaltpavement.org/index.php?productID=171>